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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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SENNIGER POWERS ONE METROPOLITAN SQUARE 16TH FLOOR ST LOUIS, MO 63102			COOLMAN, VAUGHN	
			ART UNIT	PAPER NUMBER
			3618	

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/808,103	Applicant(s) ELKINGTON, MARK	
	Examiner Vaughn T. Coolman	Art Unit 3618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 19 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 19 and 20 are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>04192005, 06232004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

This application contains claims directed to the following patentably distinct species of the claimed invention:

Species I: Figures 1-3i show an embodiment with a one directional toothed section combined with a pin and recess interface at a right angle to the direction of the toothed section.

Species II: Figure 4 shows an embodiment with a two directional toothed section utilizing pyramid-shaped teeth.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 1 is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to

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be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

During a telephone conversation with Paul I. J. Fleischut (Reg. #35,513) on 10/03/2005 a provisional election was made with traverse to prosecute the invention of species I, claims 1-18. Affirmation of this election must be made by applicant in replying to this Office action. Claims 19 and 20 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character “8” has been used to designate both “posts - ¶ 0027, line 2” and “pedestals - ¶ 0040, line 2”.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character “7” has been used to designate both “a pin - ¶ 0029, line 3” and “a pivot axis - ¶ 0024, line 4”. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the

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applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The abstract of the disclosure is objected to because the abstract exceeds the prescribed limit of 150 words. The abstract of the instant application is 176 words in length. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 13, 14, 15, 16, 17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In line 7 of each of the claims in question, “base plate opening” is positively recited. Referring to lines 4-7 in each of the claims, if the “sum of the dimension of the peg in each shift direction and the length of each arm in each shift direction is greater than the width of the base plate opening in each shift direction”, then the clamping element will not physically fit into the base plate opening. The examiner understands the term “base plate opening” to read “mounting

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plate opening”, as described in the specification in paragraph 0037, lines 9-15, and shown in FIGS 1 and 3f.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitation "the shift" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claims 3, 4 recite the limitation "the shift" in lines 2-3. There is insufficient antecedent basis for this limitation in the claims.

Claims 9, 10 recite the limitation "the elongated recesses" in line 3. There is insufficient antecedent basis for this limitation in the claims.

Claim 13 recites the limitation "shift direction" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites “the shift in two directions is at least 4 cm”. The wording renders this claim unclear as to the structure of the claimed invention. Is the shift in the forward and reverse

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longitudinal direction of the snowboard or the left and right latitudinal direction of the snowboard, or in each of the previously recited two perpendicular directions?

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Xavier (French Patent No. FR 2,755,025 A1).

In re claim 1, Xavier discloses a snowboard binding comprising: a mounting plate (FIG 6, item 5) for attachment to a snowboard (FIG 6, item 2) surface in spaced-apart relation thereto and having a mounting plate opening (FIG 4, item 15); a clamping plate (FIG 6, item 16) having a peg (shown in FIG 6) projecting through the mounting plate opening (15); a base plate (FIG 6, item 3) having a base plate opening (shown in FIG 6); a hold-down plate (FIG 6, item 21) having a central hold-down plate opening (FIG 5, item 22) for receiving the peg, wherein the hold-down plate extends over and beyond the base plate opening (shown in FIG 6); a clamp (FIG 6, item 19) fixing the clamping plate and the hold-down plate to the mounting plate; wherein the mounting plate opening is substantially larger than dimensions of the peg in two directions that are perpendicular to each other (shown in FIGS 5 and 6), so that the clamping plate, the hold-down plate, and the base plate can move relative to the mounting plate in these two directions; and

wherein there is a positive-fit connection (shown in FIG 7) of the mounting plate to the clamping plate and/or of the hold-down plate to the mounting plate.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Xavier (French Patent No. FR 2,755,025 A1) in view of Rigal et al (U.S. Patent No. 6,007,085).

In re claim 2, Xavier discloses all of the elements of the claimed invention as described above except for the mounting plate opening and the peg being dimensioned so that the shift in two directions is at least 4 cm. Rigal, however, teaches a snowboard binding configuration including various elements of the claimed invention and further shows a shift of the mounting plate (FIGS 4, 5; item 3) in two directions that are perpendicular to each other (shown in FIGS 4 and 5). Upon inspection of the drawings of Rigal, and in conjunction with the relative distance between specific hole centers disclosed in his specification, it is obvious that the shift in two directions is at least 4cm, or approximately 1-5/8". It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the snowboard binding shown by Xavier, with the mounting plate opening configuration as taught by Rigal, since such a modification would provide the advantage of the ability to adjust the binding in all horizontal directions relative to the snowboard. This is important due to the vast differences in shoe size,

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weight distribution, and riding styles of snowboard riders. Furthermore, it has been held that discovering an optimum value of a result effective variable only involves routine skill in the art.

Claims 3, 5, 7-9, 11, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Xavier (French Patent No. FR 2,755,025 A1) in view of Williams (WIPO Patent No. WO 02/070087 A1).

In re claim 3, Xavier discloses all of the elements of the claimed invention as described above except for the positive-fit connection being configured such that the shift in one direction is decoupled from the shift in the other direction. Williams teaches a snowboard binding including adjustment of the binding relative to the snowboard in two directions that are perpendicular to each other (shown in FIGS 1-5). The positive-fit connection provided by the clamping assembly shown in FIG 2 allows for vertical adjustment of the clamping plate (FIG 2, item 11), hold-down plate (FIG 2, item 14), and the base plate (not shown – referred to in the disclosure as the binding chassis (Page 10, lines 5-17). Upon inspection of FIGS 1 and 4, it is obvious that the shift in one (longitudinal) direction of the snowboard utilizing the pins (FIG 1, item 36) and recesses (FIG 1, item 38) is decoupled from the shift in the other (latitudinal) direction. The vertical engagement length of the teeth (FIGS 3, 4; item 42) corresponding to the latitudinal shift direction is between 2-3 times the vertical engagement length of the pins and recesses corresponding to longitudinal shift direction. It is obvious that when utilizing a cam clamping structure, the shift in the longitudinal direction can occur without being able to shift in the latitudinal direction due to the substantial (2-3 times) difference in vertical engagement length between the two directions. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the snowboard binding shown by Xavier,

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with the decoupling of shift directions as taught by Williams, since such a modification would provide the advantage of being able to adjust either direction exclusive of the other or both at the same time.

In re claim 5, Williams further shows the positive-fit connection including a toothed section (FIG 5, items 63, 72) extending in one direction. It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the snowboard binding shown by Xavier as modified by Williams since such a modification would provide for fine adjustment in the longitudinal direction while, according to Williams, also providing substantial resistance to any longitudinal movement of the binding during use.

In re claim 7 and 8, Xavier shows a positive-fit connection including pins (FIG 7, item 18) and elongated recesses (FIG 3, item 15) where the elongated recesses extend in one direction (shown in FIG 5).

In re claim 9, Xavier as modified by Williams shows the longitudinal direction of the toothed sections and the longitudinal direction of the elongated recesses being at right angles to each other. It would have been obvious to one having ordinary skill in the art at the time the invention was made to keep the orientation of each shift direction with respect to the snowboard as shown by Xavier (longitudinal) and Williams (latitudinal) for adjustability reasons mentioned above. In doing so, the longitudinal direction of the toothed section of Williams and the longitudinal direction of the elongated recesses of Xavier are at right angles to each other.

In re claims 11 and 12, Xavier shows each of the pins (FIG 7, item 18) being associated with a group of elongated recesses (FIG 2, items 14, 15), wherein each pin can be inserted into one recess of the group (shown in FIG 5).

Claims 4, 6, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Xavier (French Patent No. FR 2,755,025 A1) in view of Rigal et al (U.S. Patent No. 6,007,085), and further in view of Williams (WIPO Patent No. WO 02/070087 A1).

In re claim 4, Xavier as modified by Rigal discloses all of the elements of the claimed invention as described above except for the positive-fit connection being configured such that the shift in one direction is decoupled from the shift in the other direction. Williams teaches a snowboard binding including adjustment of the binding relative to the snowboard in two directions that are perpendicular to each other (shown in FIGS 1-5). The positive-fit connection provided by the clamping assembly shown in FIG 2 allows for vertical adjustment of the clamping plate (FIG 2, item 11), hold-down plate (FIG 2, item 14), and the base plate (not shown – referred to in the disclosure as the binding chassis (Page 10, lines 5-17)). Upon inspection of FIGS 1 and 4, it is obvious that the shift in one (longitudinal) direction of the snowboard utilizing the pins (FIG 1, item 36) and recesses (FIG 1, item 38) is decoupled from the shift in the other (latitudinal) direction. The vertical engagement length of the teeth (FIGS 3, 4; item 42) corresponding to the latitudinal shift direction is between 2-3 times the vertical engagement length of the pins and recesses corresponding to longitudinal shift direction. It is obvious that when utilizing a cam clamping structure, the shift in the longitudinal direction can occur without being able to shift in the latitudinal direction due to the substantial (2-3 times) difference in vertical engagement length between the two directions. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the snowboard binding shown by Xavier as modified by Rigal, with the decoupling of shift directions as taught

by Williams, since such a modification would provide the advantage of being able to adjust either direction exclusive of the other or both at the same time.

In re claim 6, Williams further shows the positive-fit connection including a toothed section (FIG 5, items 63, 72) extending in one direction. It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the snowboard binding shown by Xavier as modified by Rigal and Williams since such a modification would provide for fine adjustment in the longitudinal direction while, according to Williams, also providing substantial resistance to any longitudinal movement of the binding during use.

In re claim 10, Xavier as modified by Rigal and Williams shows the longitudinal direction of the toothed sections and the longitudinal direction of the elongated recesses being at right angles to each other. It would have been obvious to one having ordinary skill in the art at the time the invention was made to keep the orientation of each shift direction with respect to the snowboard as shown by Xavier (longitudinal) and Williams (latitudinal) for adjustability reasons mentioned above. In doing so, the longitudinal direction of the toothed section of Williams and the longitudinal direction of the elongated recesses of Xavier are at right angles to each other.

Allowable Subject Matter

Claims 13-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 13-17 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:
The structure of the clamping plate having arms that can be pushed between adjacent posts of the mounting plate, wherein the sum of the dimension of the peg in each shift direction and the length of each arm in each shift direction is greater than the width of the mounting plate opening in each shift direction is not found in the prior art made of record.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Des Ouches (U.S. Patent No. 6,666,472), Andreas (German Patent No. DE 10015457), and Dodge (U.S. Patent No. 6,817,622) each teaches snowboard bindings including features such as adjustability in two perpendicular directions and the use of either pins and elongated recesses or various toothed sections for a positive-fit connection.

Humbel (U.S. Patent No. 6,428,032), Quattro et al (U.S. Patent Application Publication No. 2003/0116931), and Carlson (U.S. Patent No. 6,786,502) each disclose various elements of the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vaughn T. Coolman whose telephone number is (571) 272-6014. The examiner can normally be reached on Monday thru Friday, 8am-6pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Ellis can be reached on (571) 272-6914. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Travis Coolman
Examiner
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